

AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) A dental instrument having a transmission device with at least one magnetic and/or magnetizable clutch element, at least one said clutch element having an air gap, the instrument comprising:

a means for influencing the transmission torque of the magnetic and/or magnetizable clutch element by modifying the magnetic flux of the clutch element, ~~said means for influencing being a magnetically soft part.~~

2. (Withdrawn) The dental instrument according to claim 1, further comprising:

a means for modifying the air gap of the clutch element.

3. (Currently Amended) The dental instrument according to claim 1, wherein:

said means for influencing ~~the magnetic flux~~ being made of a magnetically conductive material in the form of a sleeve.

4. (Previously Amended) The dental instrument according to claim 3, wherein:

said sleeve is positioned in a zone of influence of one or more clutch elements.

5. (Withdrawn) The dental instrument according to claim 3, wherein:

the means for modifying the flux guide coil is an electromagnet.

6. (Withdrawn) The dental instrument according to claim 5, wherein:

the magnetic force of the electromagnet is controlled according to service parameters.

7. (Withdrawn) The dental instrument according to claim 5, wherein:

the flux guide coil is indirectly modified by stationary magnets.

8. (Withdrawn) The dental instrument according to claim 5, wherein:
the flux guide coil is directly modified by moving magnets, and
the moving magnets transfer the torque with respect to the magnetic force.
9. (Withdrawn) The dental instrument according to claim 4, further comprising:
a softly magnetized part,
the low retentive part is only effective in a subzone of the magnetic clutch element.
10. (Currently Amended) The dental instrument according to claim 4, wherein:
switching means are provided that cooperate with the magnetic clutch element and the magnetically soft part means for influencing.
11. (Currently Amended) The dental instrument according to claim 1, wherein:
the magnetic clutch element enabling a tool to be moved in an opposite direction to an original working direction by means of a force created in the opposite direction after declutching of the magnetic clutch element is chosen in such a manner, that after the declutching of the magnetic clutch element a force is created, which is opposite to an original working direction, by means of which the tool can be moved into the opposite direction.
12. (Previously Amended) The dental instrument according to claim 1, wherein said transmission device being in the form of a neck drive, said dental instrument further comprising:
~~a neck drive as said transmission device;~~
a drive motor with high rotation speed; and
a reduction gear for reducing the a rotation speeds in a zone between 5 and 25 rotations/sec. (300 to 2100 rotations/minute).
13. (Currently Amended) The dental instrument according to claim 1, wherein:
~~the a drive tool can be loaded with torsion up to a threshold value; and~~

the transmission device is formed with the magnetic clutch element so that the threshold value of the drive tool is never reached.

14. (Original) The dental instrument according to claim 1, further comprising:
a tool for root canal treatment.

15. (Withdrawn) The dental instrument according to claim 1, wherein:
the magnetic clutch element is arranged so that rotations are transmitted on an input side and on an output side.

16. (Withdrawn) The dental instrument according to claim 1, wherein:
the magnetic clutch element is arranged such that a part of the clutch performs a rotation, and the other part of the clutch performs a translation.

17. (Withdrawn) The dental instrument according to claim 1, wherein:
both magnetic clutch elements perform translations.

18. (Original) The dental instrument according claim 1, wherein:
a connection point is provided on a motor,
said connection point corresponds to the connection point of a tool working with a high rotation speed.

19. (New) The dental instrument according to claim 1, wherein:
said means for influencing being a magnetically soft part.

ATTORNEY DOCKET NO.: 066489-0012

Application No.: 10/003,293

Page 5

AMENDMENTS TO THE DRAWINGS:

The attached drawing sheets include changes to Figs. 3 and 15, wherein the connection point corresponding to the connection point of a tool working with a high rotation speed is shown in Fig. 3, and a drive tool, such as the root canal tool, has been illustrated in Fig. 15.

Attachment: Replacement Sheets

Annotated Sheets Showing Changes